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## Outdoor provision for babies and toddlers: exploring the practice/policy/research nexus in English ECEC settings

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# Outdoor provision for babies and toddlers: exploring the practice/policy/research nexus in English ECEC settings

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## ABSTRACT

A wealth of research evidences the positive impact of the outdoors for young children. Yet there is little relating to the experiences of babies and toddlers who attend daycare settings. This paper offers new knowledge about outdoor provision for under twos in the English context where there is a lack of explicit policy support for outdoor practice. Findings, captured through an online survey from Early Childhood Education and Care (ECEC) settings in one geographically diverse county, reveal a generally positive picture. This suggests that practice is ahead of research. However, the survey also highlights significant variability in outdoor provision. We suggest that, in the absence of a strong policy driver ECEC settings may be inadvertently laying the foundations for inequality of access to the outdoors. Furthermore, a lack of research evidence to inform practice may be contributing to an underdevelopment of the pedagogic value of outdoor environments.

## KEYWORDS

Outdoor environment; under twos; pedagogy; babies; toddlers; early childhood education and care

## Introduction

A growing body of international research indicates the benefits of engaging with outdoor environments for children's learning and development. Over the past fifteen years, there have been six evidence-based reviews of outdoor learning (Rickinson et al. 2004; Malone 2008; Gill 2011; Dillon and Dickie 2012; Fiennes et al. 2015; Malone and Waite 2016) all pointing to the health, wellbeing and educational benefits of children spending time outdoors. However, there is concern that 'access to these benefits is not equitable especially for those from areas of high deprivation' (Malone and Waite 2016, 6). Educational settings are increasingly understood as having a vital role to play in addressing this inequality of access to the outdoors (DEFRA 2011, 2018).

In this paper, we pick up a conversation started by Moser and Martinsen more than a decade ago in this journal which focuses specifically on the role of Early Childhood Education and Care (ECEC) settings in providing outdoor access for young children. Moser and Martinsen (2010) highlighted a lack of research about outdoor environments in

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childcare settings and presented an exploratory study of the situation in Norway. Their aim was to understand what type of outdoor environments Norwegian kindergarten provide for children aged one to five years and, although largely descriptive, the study established the importance of outdoor environments as pedagogic spaces that can enhance or restrict young children's opportunities for learning and development. Within Norway, the importance of outdoor provision is enshrined in educational policy and supports the development of outdoor pedagogy. The Norwegian Framework for Kindergartens (NDET 2017), for example, devotes a section to Nature, Environment and Technology and explicitly requires kindergartens to provide 'outdoor experiences that teach them [children] to move around and spend time in the outdoors during the different seasons' (52). Internationally, there is considerable diversity in the policy commitment to outdoor learning within curricula frameworks, regulations and guidelines (Malone and Waite 2016). In Australia, the national Early Years Learning Framework (EYLF) and national quality standards mandate settings to provide outdoor learning experiences (ACECQA 2017). In contrast, in the USA, Cooper (2015, 85) notes 'the outdoor learning environment goes virtually unmentioned in national and state level standards, guidelines and regulations'. In the UK, the status of outdoor learning in early years policy varies considerably. The recent practice guide for the early years in Scotland, *Realising the Ambition*, (Education Scotland 2020), makes 29 references to 'outdoors' and 17 to 'nature'; it stresses the importance of being outdoors for babies, whereas the English Early Years Foundation Stage (DfE 2017) has no references to nature and only three to 'outdoors' in its discussion of suitable premises and health and safety requirements.

Our focus differs from Moser and Martinsen (2010) in two respects. Firstly, we explore outdoor provision in the English context which is defined by an absence of educational policy support. Secondly, our interest is in the experiences of babies and toddlers attending formal daycare as this is a particularly neglected area of study (Bilton, Bento, and Dias 2017). This focus is significant because of the number of under twos who attend childcare settings both in England and beyond; recent data produced by the Organisation for Economic Cooperation and Development (OECD) reveals that one-third of children aged 0–2 are enrolled in ECEC across the member states (OECD 2019). The research on which this paper is based is part of a larger project funded by The Froebel Trust. This paper focuses on empirical data collected during the second stage of the project and presents new knowledge about outdoor provision for under twos in ECEC settings in England.

## **Literature review: outdoor provision for under twos**

We start by offering an overview of the existing evidence base in relation to outdoor provision for under twos based on our recent review of the international research literature (Kemp and Josephidou 2020). This is of vital importance, not only as context, but also because, 'practice relies on evidence to shape it' (Malone and Waite 2016, 28). The review confirmed that research focused on outdoor provision for under twos in ECEC settings is sparse. We found no sources based in the UK and a small body of work (21 papers) from Norway, Finland, USA, Canada, Australia, Portugal and Ireland. Within the published research there is little explicit discussion about the types of outdoor environment that are provided for babies and toddlers nor how much access they might have to

them. Where outdoor provision is mentioned, it suggests a rather negative situation. Writing from the context of Australia, Morrissey, Scott, and Wishart (2015, 31) suggest that outdoor spaces for the youngest children in ECEC are ‘characterised by artificial, “safe” and non-challenging play environments’ and are ‘devoid of natural features’. Similarly, Dinkel et al. (2019) found that best practice recommendations that infants should be taken outside 2–3 times per day and toddlers should have 60–90 min of outdoor play daily were not followed in their study of two settings in the USA. This is surprising given that outdoor provision is recognised as a key indicator of quality (Cooper 2015). However, the practice-based challenges of providing high quality environments for under twos are considerable because such spaces ‘need to accommodate the needs of young babies, crawling infants, new walkers and active climbers’ (Thigpen 2007, 20).

A small but growing body of research is starting to explore how ‘quality’ can be understood in relation to very young children and how their developmental needs of moving, sensing and sleeping can be met in the outdoor environment. The implication is that high quality outdoor spaces should provide opportunities that support all these ways of being outdoors if they are to be considered as pedagogic spaces. Yet it is being physically active that is most often considered in relation to the outdoor environment (Byrd-Williams et al. 2019; Dinkel et al. 2019; Hewitt et al. 2018; Carsley et al. 2016; Reunamo et al. 2014). It is important to note that, within this research literature, the focus tends to be on children who are already walking so the needs of young babies are often ignored.

The specific sensory affordances associated with natural outdoor environments are starting to be understood in relation to babies and toddlers. Close observation of babies by Hall et al. (2014, 198) revealed how ‘they used their eyes, hands, feet, mouths and entire bodies to experience the minutia’. The authors suggest that these embodied interactions with the natural environment provide multi-sensory stimulation which has a different impact on the nervous system to an indoor environment and supports healthy development. Similarly, a study of a setting in Melbourne, Australia (Morrissey, Scott, and Wishart 2015) compared the responses of infants and toddlers to natural and built play space using behaviour mapping and child tracking. After the outdoor area was redesigned to introduce plants and other natural features, the researchers found that the children spent more time engaged in quiet and sedentary activities as well as a wide variety of physical activities. They also noted increased sensory engagement with the natural world, ‘children were observed sitting or standing still, peacefully observing a bee flying around the plants or branches swaying in the breeze’ (49). Both studies suggest that ‘provocative’ ground surfaces and interesting natural structures and features are important for very young children to explore.

No research was identified which specifically explores the practice of babies or toddlers sleeping outside in formal daycare; yet this pedagogy appears to be an established cultural practice within Scandinavian settings. Moser and Martinsen (2010, 462) noted that ‘the youngest children in Norwegian Kindergartens usually take their naps outside, during both summer and winter’. The practice of outdoor sleeping was also noted by Kaarby and Tandberg (2017). Ulla (2017) suggests that sleeping should be understood as a key aspect part of relational infant-toddler pedagogy rather than as something that effectively removes the child from pedagogic consideration. There is a small body of research that reveals some of the health and development benefits of outdoor sleeping. One example is Tourula et al.’s (2010) study of three-month-old

babies in Finland which found that infants slept significantly longer (92 min) when they were outdoors. The authors argue this may be because babies can be swaddled without over-heating when sleeping outdoors. They also suggest that the lengthening of sleep duration in babies may have a wider health benefits in terms of supporting brain maturation (Marks et al. 1995), cognition (Hills, Hogan, and Karmiloff-Smith 2007) and reducing the risk of obesity in later life (Landhuis et al. 2008).

In conclusion, whilst research in this area is limited, it suggests that outdoor provision is important in supporting the holistic development of the youngest children and needs to be considered carefully so that pedagogical possibilities are enriched rather than minimised. We argue that the research conversation started by Moser and Martinsen (2010) more than ten years ago, in relation to young children in kindergartens, urgently needs to be revisited in relation to babies and toddlers. Our research, therefore, draws on their methodological approach to survey provision but is revised to reflect the following: a narrower age focus (under twos), different cultural context (England as opposed to Norway); changes in policy and research evidence. We ask: How are ECEC settings in England providing opportunities for babies and toddlers to engage with the outdoor environment?

## **Methodology**

### ***Design***

This is the first time a survey has been undertaken to establish what outdoor provision looks like for under twos in English ECEC settings. An online survey was sent to all settings with provision for under twos in the large and geographically diverse county of Kent (UK). The content of the survey questions was informed by the first phase of the project which was a literature review (Kemp and Josephidou 2020) and drew particularly on Moser and Martinsen's (2010) Norwegian questionnaire. Colleagues within our professional networks were also consulted to help identify ideas around current practice. The survey was piloted with five participants who are, or have been, ECEC practitioners; it was then subsequently revised.

### ***Materials***

The final survey consisted of a mixture of closed and open ended questions focused on the following themes; the type and size of setting; the nature and extent of its outdoor provision; how much time children spend outdoors throughout the year; the activities the children engage in, the resources provided by the setting to support this and their view of the benefits of outdoor activities on the children in their care. We asked respondents to differentiate between provision for babies (under a year) and toddlers (12–24 months) as the research literature had highlighted the absence of babies and a consideration of their needs. The full survey questions can be accessed in a separate report (Kemp, Durrant, and Josephidou 2020).

### ***Procedure***

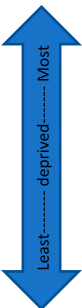
The study was approved by the University Ethics committee in line with BERA (2018) ethical guidelines. Neither settings nor individuals were identifiable. Access to the

survey and associated data was password protected and could not be accessed by a third party. The list of settings with provision for under twos was generated using publicly available information as well as our professional networks. 133 settings were identified, and these were all emailed a link to the survey in July 2019. 37 settings responded giving an initial response rate of 28%. All settings that had not responded were contacted by telephone. In total 68 settings responded to the audit giving an overall response rate of 51%. Incomplete responses, duplications (where someone had started the audit and then logged back in to complete it again) and those which were not relevant to the research (i.e. the setting doesn't include provision for under twos) were eliminated from the dataset. Of the original 68 responses, 15 were removed giving a final sample of 53 settings.

### Sample

Our final response rate of 40% is slightly above the cited average for online surveys which are recognised as yielding lower rates than other modes (Saleh and Bista 2017); Nulty (2008) cites 33% in his review of educational surveys whilst Baruch and Holtom's (2008) analysis of surveys published in refereed academic journals suggests 35.7%. The sample is broadly representative in terms of socio-economic status and geographical location of settings with provision for the under twos in Kent although responding settings are slightly more likely to be located in less deprived, more rural locations than those that did not respond. Table 1 compares responding and non-responding settings [as measured by their Index of Multiple Deprivation (IMD) score and geographical classification (ONS 2011)]. This shows that proportionally less responses were received from settings located in deprived areas (IMD, deciles 1 and 2; 3.8%) and proportionally more were received from less deprived areas (IMD, deciles 9 and 10; 20.7%). Additionally, a higher percentage of responding settings are rural (33.9%) compared to those settings with provision for under twos that did not respond (22.9%).

**Table 1.** Respondents/non-respondents by IMD and geographical location.

Index of multiple deprivation			Type of location		
IMD decile	% (n) respondents	% (n) non-respondents	Urban/Rural Category	% (n) respondents	% (n) non-respondents
	3.8% (2)	6.2% (5)	Urban major conurbation	7.5% (4)	8.4% (7)
	–	9.6% (8)	Urban city and town	52.8% (28)	66.3% (55)
	7.5% (4)	12% (10)	Rural town and fringe	13.2% (7)	13.3% (11)
	11.3% (6)	13.3% (11)	Rural village	11.3% (6)	8.4% (7)
	17% (9)	10.8% (9)	Rural hamlets and isolated dwellings	9.4% (5)	1.2% (1)
	15.1% (8)	3.6% (3)			
	7.5% (4)	18.1% (15)			
	11.3% (6)	13.3% (11)			
	13.2% (7)	7.2% (6)			
	7.5% (4)	6% (5)			
Location non-identifiable:	5.6% (3)			5.6% (3)	
Total	100% (53)	100% (83)	Total	100% (53)	100% (83)

### **Limitations of final dataset**

The final sample size is small and, given the voluntary and self-selecting format of the survey, there is a possibility that it is not representative. Also, some settings may not have been contacted as there is no definitive list of settings with provision for under twos. The challenge of identifying an up-to-date and accurate email list of potential participants is recognised as being one of the most significant issues within online survey methodology (Saleh and Bista 2017). Surveys also require respondents to understand questions unambiguously and even though our survey was piloted, some questions were misunderstood leading to potential response bias. Ethically, it was important to be candid about the aims of this research, but this may have introduced demand characteristics (Orne 1962) and inevitably setting managers attempted to show their setting in the best light. The survey format also relies on the setting manager having an accurate knowledge of provision and practice for under twos. All these potential limitations need to be considered when interpreting the findings and their implications.

### **Analysis**

The quantitative and qualitative data were analysed concurrently and are considered to have equal status within this research. The quantitative data was analysed using the Statistics Package for Social Science (SPSS 23) and the responses to each question were converted into the valid percentage of those who answered each question. 43 settings (81%) provided qualitative responses and these were analysed using Nvivo 12. Their initial coding and subsequent grouping into themes can be seen in Table 2.

Where qualitative comments are cited a code is used as the only identifying feature. The code for each setting is made up of a number (setting 1–53); a letter (U indicating urban or R indicating rural); a second number (1–10 referring to its IMD decile). For example, ‘23U1’ indicates setting number 23 in an urban location with an IMD score of 1. The findings from the quantitative and qualitative data are presented in an integrated manner to provide richer insights into the research question.

**Table 2.** Initial coding of qualitative comments and how they were organised into themes.

Initial codes	Themes
Weather	Factors which impact on frequency, duration and experiences of outdoor engagement for young children
Access	
Children’s preferences	
Parents	
Routines	
Staffing	
Finance	
Leadership	Benefits for young children of being outdoors
Setting type	
Health and well-being	
Physical development	
Behaviour	Pedagogies and possibilities for young children outdoors
Sleeping	
Eating	
Nature	
Senses	



## Findings: Better than the policy/research deficit might indicate ... but very varied provision

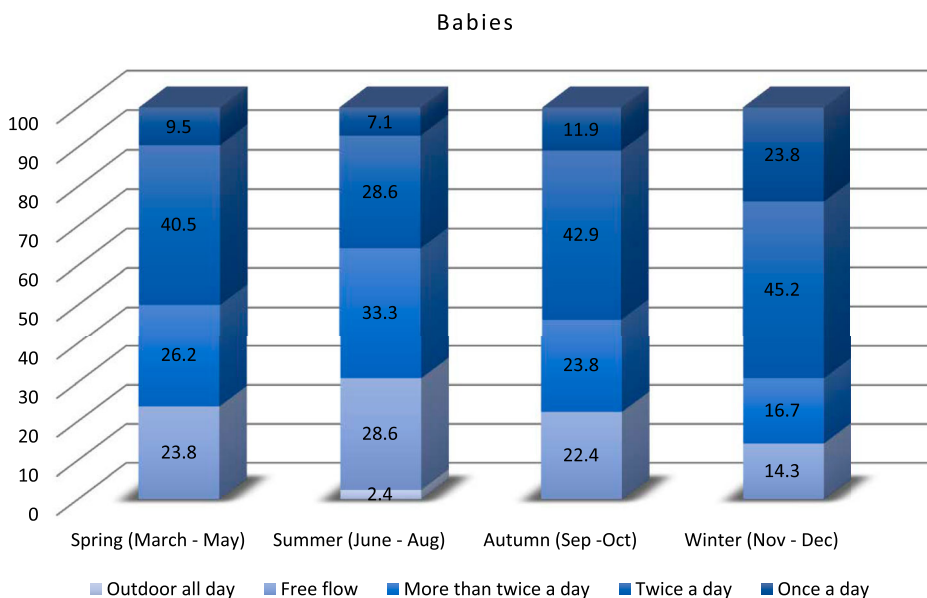
The findings from the survey reveal a more positive picture than the policy/research deficit might indicate. ECEC setting managers appear to recognise the pedagogic potential of outdoor spaces and acknowledge their responsibility in providing regular access for babies and toddlers. However, important differences exist between settings' provision. Some report extensive natural outdoor environments, although the majority have more modest provision with limited inclusion of natural elements. This highlights the diversity of outdoor provision offered by English ECEC settings and the varied experiences of babies and toddlers. Although we asked separate questions about provision for babies and toddlers, very few differences were reported.

### Access to the outdoors

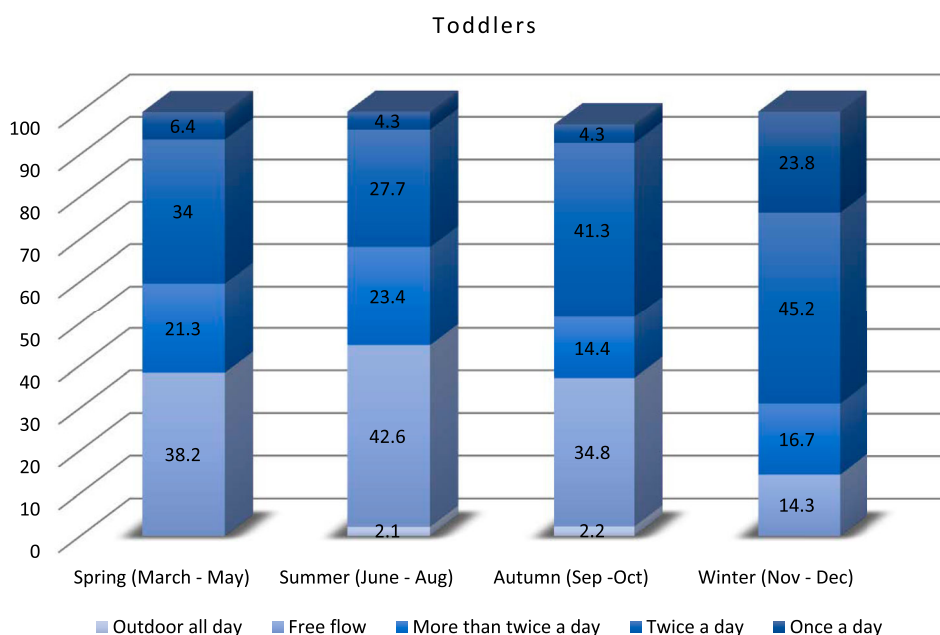
**Frequency:** We found considerable variation in the frequency of access to the outdoors for babies and toddlers. Most settings report that babies (<76%) and toddlers (<87%) in their care go outdoors twice a day or more all year around. Free-flow provision is more common for toddlers than babies although a minority of settings state they provide free-flow access for both babies (14%) and toddlers (28%) throughout the year (Figures 1 and 2).

**Duration:** The amount of time children spend outside varies considerably by season. Most centres reported that both babies (<39.5%) and toddlers (<58.1%) spent more than an hour outside each day, even in the winter (Figures 3 and 4).

**Benefits:** Most respondents report that spending time outside is very important for the holistic development of both babies and toddlers. They recognise the many ways that very young children benefit from access to outdoor environments.



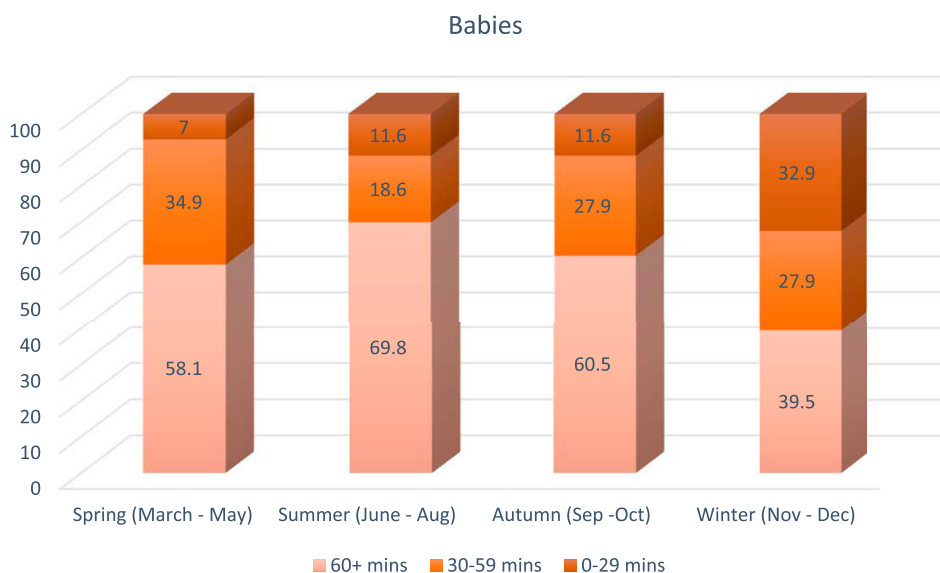
**Figure 1.** Frequency of access to the outdoors for babies (percentage of respondents).



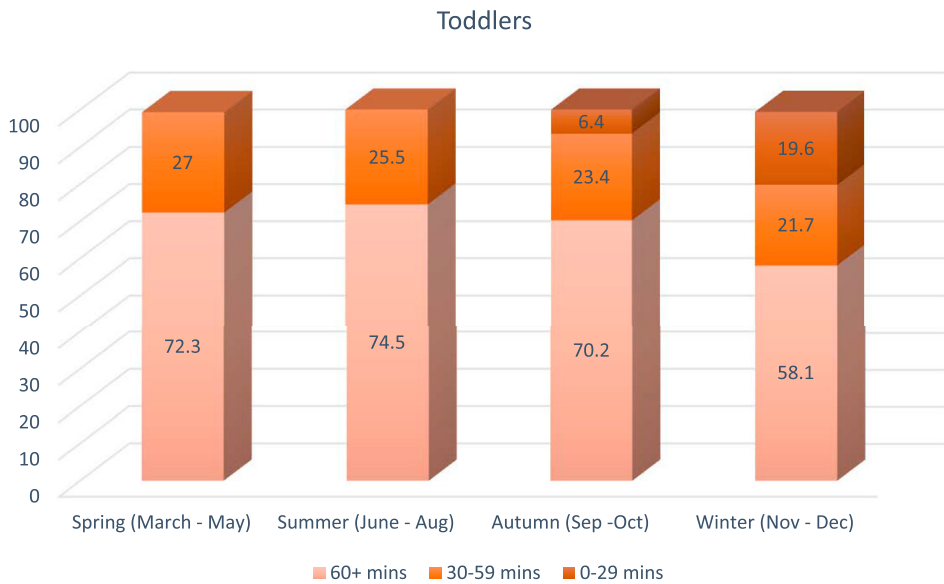
**Figure 2.** Frequency of access to the outdoors for toddlers (percentage of respondents).

This access is seen to be particularly important for children from homes without a garden (Figure 5):

It is important for them to experience outside, many of our children's outside experience is limited due to living in a flat. (12U5)



**Figure 3.** Duration of time spent outdoors for babies each season (percentage of respondents).

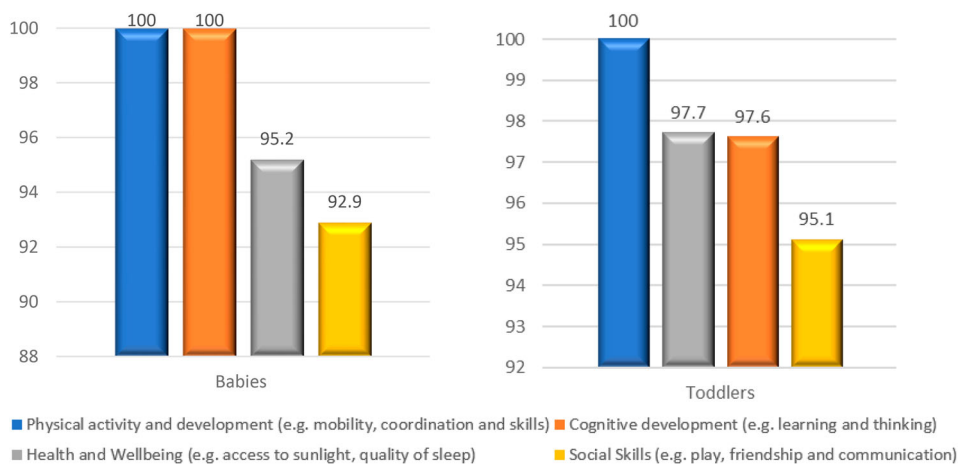


**Figure 4.** Duration of time spent outdoors for toddlers each season (percentage of respondents).

**Barriers:** Reasons for the differences in time spent outdoors are varied; the most frequently reported factor was the weather, particularly for babies. However, in some settings weather conditions are understood as an opportunity *we do go out in all weathers and celebrate all seasons* (29U7). Parental support is also identified as an important influence:

Parents do not want the children to go outside in colder weathers. (29U7)

as are the preferences of the children themselves. In some cases, the way provision is arranged can be a limiting factor:



**Figure 5.** The benefits of being outside for babies and toddlers.

the babies have free flow access to a decked area but the toddlers do not so it can be more difficult to get outside access more frequently (6U5)

### ***The nature and extent of outdoor spaces***

The nature and extent of outdoor spaces provided for the youngest children varies between settings.

**Size:** Although the mean size of the outdoor area suggests generous outdoor provision for both babies and toddlers across all settings, the range varies from a modest 5 m<sup>2</sup> to a vast 28,328 m<sup>2</sup> as shown in Table 3.

Qualitative analysis suggests that the extreme variation reported might be due to differing interpretations of what the ‘outdoor area’ refers to.

**Type of outdoor environment:** The outdoor environments provided specifically for babies and toddlers are mainly shared spaces (72%). The most common surfacing is artificial grass (62.3%,  $N = 33$ ), followed by a hard surface (tarmac or paving stones, 50.4%,  $N = 32$ ), a soft surface (47.2%,  $N = 25$ ) and grass (45.3%,  $N = 24$ ). Several settings referenced their ‘beyond the gate approach’ which includes providing regular opportunities for babies and toddlers to access parks, fields and other outdoor environments in their local community:

Our babies and toddlers frequently go out for walks (mostly pushed in two six-seater push-chairs) along the canal, beach, field, shop or park nearby. (6U5)

Such environments might be particularly important for under twos as they can be accessed via pushchairs and prams allowing access to a wider geographical space and diverse play environments.

### ***The outdoors as a pedagogic space***

**A pedagogic space for physical development:** All settings report that they provide varied resources to support physical activity. Climbing was the most supported gross motor activity with provision including (in order from most frequently used), steps, moveable climbing structures, fixed climbing structures, slopes and mounds. Although some settings mentioned natural features, there is a reliance on fixed and moveable climbing structures and the ‘steps’ mentioned are sometimes functional (Figure 6).

**A pedagogic space for sensory engagement:** Settings report they provide a rich sensory environment including herbs and flowers for smelling (Figure 7).

Only a small number of settings emphasised the natural characteristics of the setting environment or indicated they were in the process of developing this. Nature or the natural environment was referred to in just three comments.

**Table 3.** Amount of reported indoor and outdoor space available to babies and toddlers.

	Babies		Toddlers	
	Indoor	Outdoor	Indoor	Outdoor
Mean	76.3 m <sup>2</sup>	4791 m <sup>2</sup>	62 m <sup>2</sup>	4528 m <sup>2</sup>
Median	45 m <sup>2</sup>	105 m <sup>2</sup>	33 m <sup>2</sup>	100 m <sup>2</sup>
Mode	25 m <sup>2</sup> (×2)	–	45 m <sup>2</sup> (×2)	100 m <sup>2</sup> (×2)
Range	115 m <sup>2</sup> (5–220 m <sup>2</sup> )	28323 m <sup>2</sup> (5–28328 m <sup>2</sup> )	115 m <sup>2</sup> (5–220 m <sup>2</sup> )	28323 m <sup>2</sup> (5–28328 m <sup>2</sup> )

The natural environment provides the exact stimulus that babies need without being too overpowering. Outdoor environments provide opportunities for babies to use all their senses to explore them. (5R8)

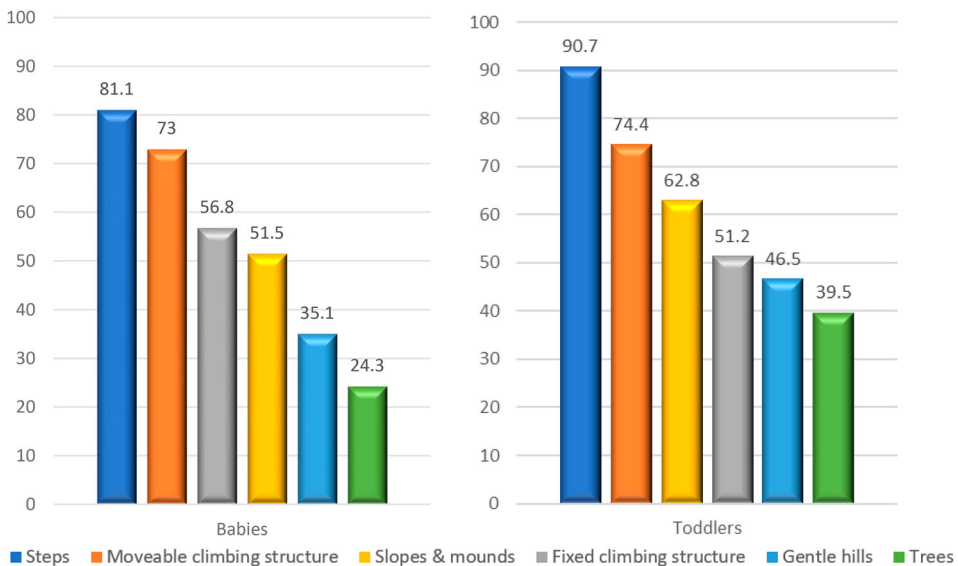
**A pedagogic space for sleeping:** An initial review of the quantitative responses would suggest that almost half of the settings saw the outdoors as a place for children to sleep; 49% of respondents said that babies slept outside at their setting whilst the figure for toddlers was 43%. However, the qualitative comments added further insight into these figures by suggesting that, although in some cases outdoor sleeping was a planned pedagogy, in other settings it occurred in a more incidental way:

Only if children have fallen asleep in pushchair when outside walking/operating school runs, for example. (25U4)

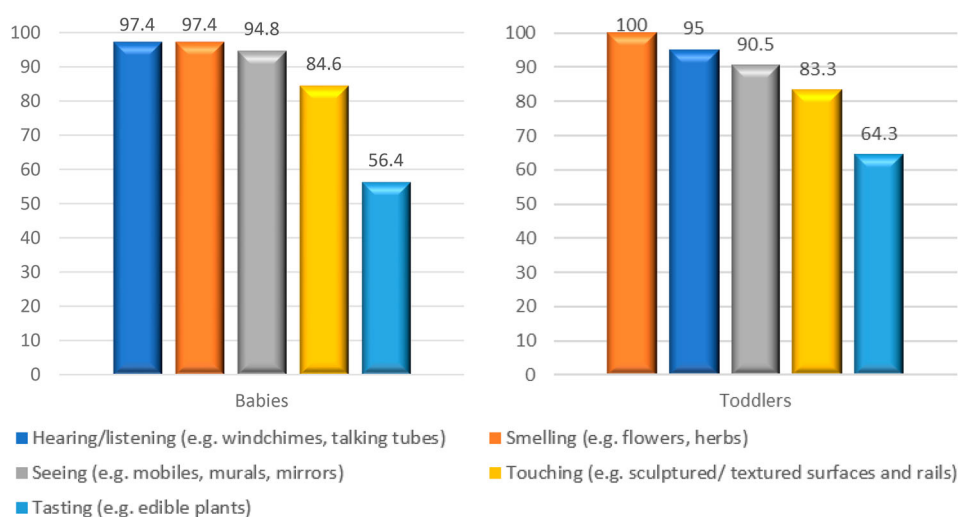
We have sleep pods outside; our children can crawl in and curl up when they need to or they can be encouraged to rest by their keypersons who recognize the signs of the need to rest in their individual children.: do not put our children to bed by the clock but by their needs. They may also go to sleep indoors. (1R4)

## Discussion

To contextualise and explore the implications of our findings we consider what Malone and Waite (2016, 28) term the ‘research/policy/practice nexus’; that is the complex and mutually reinforcing relationships between evidence, the policy environment and what settings do in practice. We drew attention to the lack of support from education policy for outdoor learning in England earlier in this paper. If, as Malone and Waite suggest, ‘practice relies on evidence to shape it, but its uptake and embedding is accelerated by policy support’ (2016, 28), then expectations about what practice looks like in



**Figure 6.** Percentage of centres who have each resource to engage babies & toddlers in outdoor climbing activities.



**Figure 7.** Types of sensory engagement supported by the setting.

England would be set low. Our survey reveals a positive picture and leads us to conclude that practice is ahead of both research and policy although care needs to be taken in generalising beyond the context of the responding settings.

### ***Practice leading early education research and policy***

Our research evidences the way English settings value the outdoors as part of their pedagogy for babies and toddlers. Our findings are largely consistent with Scandinavian studies where being outdoors is understood as being a valued part of society and culture more generally and where there is strong policy support (Moser and Martinsen 2010). Kaarby and Tandberg (2017), for example, found that Norwegian children aged 1–3 are outdoors 1.6 h every day on average but the range is 0.5–3.4 h. Our study, focusing on 0–2s suggests that most settings provide outdoor access for at least an hour a day (60 min + being the modal category all year round for babies and toddlers). Similarly, the size and variety of outdoor spaces which babies and toddlers access suggests outdoor environments are valued within English settings. The mean size of outdoor area in Moser and Martinsen's (2010) Norwegian study was 2619m<sup>2</sup> with a range of 102–8000 which is smaller than that reported in our survey although considering the outliers in our sample, the figures are broadly similar.

The lack of explicit educational policy support, and underpinning research evidence, to guide outdoor provision for babies and toddlers, in England, places significant responsibility on individual settings and practitioners resulting in varied and piecemeal practice. However, settings face multiple challenges in supporting this engagement. Understanding how to develop outdoor provision to accommodate (and value) the vagaries of the weather for the youngest children is not easy. Similarly, parental concerns about risk and routine can be limiting. Not all settings are set up with access to appropriate outdoor environments or have access to resources to develop their provision. Without explicit curriculum guidance or relevant research evidence to draw upon, settings are

left to develop their own priorities and approaches to outdoor provision. Whilst some stated that their practice is led by the children's preference this can be problematic as very young children can only choose what is readily available to them. As Moser and Martinsen (2010, 468) stated in their study of Norwegian settings 'children are to a greater extent dependent on the staff's values and expertise', and this appears to be the case in our study of these settings in England.

Although the autonomy accorded to individual ECEC settings may be superficially appealing, and in a neo-liberal educational context aligns with the notion of parental choice, our research provides insights into some of the possible implications of the policy and research deficits. We consider here the effects and implications of the absence of explicit educational policy support and the ability of ECEC settings to address inequalities in access to the outdoors. We suggest also that a lack of research evidence may be contributing to an underdevelopment of the pedagogic value of outdoor environments in English ECEC settings. These are both issues raised a decade ago in relation to Norwegian kindergarten (Moser and Martinsen 2010).

### ***The policy deficit: inequality of access to high quality outdoor provision***

Not all children are provided with the same outdoor opportunities; some settings have very little space, and few resources, whilst others offer access to extensive and varied outdoor environments either directly linked to their sites or within their local community. Whilst there is consensus that spending time outdoors is important for both babies and toddlers, there is considerable variation in the level of resources and the priority outdoor engagement is given in practice. The nature and extent of the differences in outdoor provision are concerning; if local practice is reflected in the national context, then in England, the youngest children's experiences of engaging with the outdoors when in formal daycare settings are far from equitable. Such variation in outdoor provision was also noted by Moser and Martinsen who raised concerns that differences 'can affect their play and thus their learning and development processes as well' (2010, 469). More recent research from different cultural contexts has confirmed that the nature and extent of the outdoor environments influences the learning and development opportunities offered (Morrissey, Scott, and Wishart 2015; Dinkel et al. 2019).

Early childhood settings are increasingly being positioned in policy terms to deliver wider (non-educational) public agendas through their outdoor provision but this research raises questions about their role; both DEFRA (2018) and DHSC (2019) emphasise the health and well-being benefits of time spent outdoors. The developing policy narrative is that settings and schools provide an effective way of reducing inequality of access to the outdoors and its associated benefits due to their reach. Our research challenges this narrative as it suggests that rather than reducing inequality of access to the outdoors, ECEC settings may be inadvertently laying the foundations for it, in the absence of a strong educational policy driver. As Malone and Waite recognise in relation to schooling, 'the absence [of outdoor learning] from key policy documentation is not neutral in its effects but in neoliberal contexts of instrumental education, can effectively serve to excise vital experiences from children's lives' (2016, 31). Our research demonstrates the diversity of outdoor experiences very young children might access depending upon which setting they attend. Our concern is that these very early inequalities may

become more pronounced as the child grows older and may contribute to a widening gap not only in learning but also in their broader development.

### ***The research deficit: missing outdoor pedagogies***

In most settings the way that outdoor spaces are resourced suggests they are understood primarily as supporting physical development and activity. We found the same promotion of physical activity in resourcing of outdoor environments that was highlighted in the limited research literature. Settings self-reported a range of resources related to physical activity, but it was noteworthy that both outdoor sleeping pedagogies and nature engagement pedagogies were less common in practice. This raises the question of whether settings share Ulla's (2017) image of the ideal child as physically active, and whether this limits their provision and pedagogic practices outdoors particularly for children who are not yet fully mobile. Sleeping outdoors is no longer a recognised cultural practice in England and, where examples were given, they were often incidental (falling asleep in a pushchair) rather than intentional. Similarly, whilst most settings reported they provide a rich and varied sensory environment outdoors, opportunities for engagement with nature (e.g. trees, plants, animals) are more limited. The popularity of artificial grass suggests that even whilst engaging with the outdoor environment, young children can be interacting with resources which lead them away from nature not towards it. This resonates with Moser and Martinsen's (2010) study which found that in Norway fewer than one-third of kindergarten provided nature-related experiences and only a quarter regularly visited natural spaces 'beyond the gates'. Our English settings may reflect Kaarby and Tandberg's concern (2017, 34) that 'being outdoors is in itself the goal so that the 'pedagogical value is underdeveloped'.

### **Conclusions**

The originality of this research lies in its identification of practices and pedagogies related to babies' and toddlers' engagement with the outdoor environment in settings in England. In this paper, we offer new knowledge about what outdoor provision looks like in the English context: a previously unexplored aspect of both Early Childhood Education and Care and outdoor learning. We argue that practice is leading both early childhood education policy and research in the area of outdoor pedagogies for under twos. Although there is little reference to their engagement with the outdoors in the research literature, evidence from practice obtained through our audit, suggests that outdoor provision for young children has not been forgotten. Yet without strong policy support and a robust research base to inform provision, practice has become piecemeal and varied.

Whilst the focus of our research is England, the research and policy deficits we identify have international reach and significance. The omission of educational policy support is particularly problematic if we consider issues of equality of opportunity for all children; their access to the outdoors should not be dependent on the vision or understanding of pedagogy of the setting they are able to attend. We question the positioning of ECEC settings as mechanisms for enhancing outdoor access in the absence of explicit educational policy support. Furthermore, the lack of research focus on under twos' engagement with the outdoors can allow for certain pedagogies, such as engagement with nature, to lay



dormant. Capturing the reality of outdoor practice through research is challenging, but it is essential to the development of this most important of conversations.

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## References

- ACECQA (Australian Children's Education and Care Quality Authority). 2017. "Guide to the National Quality Framework." Accessed 29 March 2021. <http://www.acecqa.gov.au/nqf-changes/guide-to-the-national-quality-framework>.
- Baruch, Y., and S. Holtom. 2008. "Survey Response Rate Levels and Trends in Organizational Research." *Human Relations* 61: 1139–1160. doi:10.1177/0018726708094863.
- BERA (British Educational Research Association). 2018. <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018>
- Bilton, H., G. Bento, and G. Dias. 2017. *Taking the First Steps Outside*. Oxon: Routledge.
- Byrd-Williams, C., E. Dooley, C. Thi, C. Browning, and D. Hoelscher. 2019. "Physical Activity, Screen Time, and Outdoor Learning Practices and Policy Implementation: A Cross Sectional Study of Texas Child-Care Centres." *BMC Public Health* 19: 274. doi:10.1186/s12889-019-6588-5.
- Carsley, S., L. Liang, Y. Chen, P. Parkin, J. Maguire, and C. Birken. 2016. "The Impact of Daycare Attendance on Outdoor Free Play in Young Children." *Journal of Public Health* 39 (1): 145–152.
- Cooper, A. 2015. "Nature and the Outdoor Learning Environment: The Forgotten Resource in Early Childhood Education." *International Journal of Early Childhood Environmental Education* 3 (1): 85-97, Accessed 29 March 2021. [EJ1108430.pdf \(ed.gov\)](https://www.ed.gov/eo/118430.pdf).
- DEFRA (Department for Environment, Farming and Rural Affairs). 2011. *The Natural Choice: Securing the Value of Nature*. London: HMSO. Accessed 29 March 2021. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/228842/8082.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf).
- DEFRA (Department for Environment, Farming and Rural Affairs). 2018. "A Green Future: Our 25-Year Plan to Improve the Environment." Accessed 29 March 2021. <https://www.gov.uk/government/publications/25-year-environment-plan>.
- DfE (Department for Education). 2017. "Statutory Framework for the Early Years Foundation Stage Setting the Standards for Learning, Development and Care for Children from Birth to Five." Accessed 29 March 2021. [https://www.foundationyears.org.uk/files/2014/07/EYFS\\_framework\\_from\\_1\\_September\\_2014\\_with\\_clarification\\_note.pdf](https://www.foundationyears.org.uk/files/2014/07/EYFS_framework_from_1_September_2014_with_clarification_note.pdf).
- DHSC (Department of Health and Social Care). 2019. "UK Chief Medical Officers' Physical Activity Guidelines." Accessed 29 March 2021. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf).
- Dillon, J., and I. Dickie. 2012. "Learning in the Natural Environment: Review of Social and Economic Benefits and Barriers." Natural England Commissioned Reports, Number 092. Accessed 29 March 2021. <http://publications.naturalengland.org.uk/publication/4524600415223808>.
- Dinkel, D., K. Snyder, T. Patterson, S. Warehime, M. Kuhn, and D. Wisneski. 2019. "An Exploration of Infant and Toddler Unstructured Outdoor Play." *European Early Childhood Education Research Journal* 27 (2): 257–271. doi:10.1080/1350293X.2019.1579550.

- Education Scotland. 2020. "Realising the Ambition." Accessed 29 March 2021. <https://education.gov.scot/media/3bjpr3wa/realisingtheambition.pdf>.
- Fiennes, C., E. Oliver, K. Dickson, D. Escobar, A. Romans, and S. Oliver. 2015. *The Existing Evidence-Base About the Effectiveness of Outdoor Learning*. London: Institute of Outdoor Learning.
- Gill, T. 2011. *Children and Nature: A Quasi-Systematic Review of the Empirical Evidence*. London: Sustainable Development Commission.
- Hall, E., S. Linnea Howe, S. Roberts, L. Foster Shaffer, and E. Williams. 2014. "What Can We Learn Through Careful Observation of Infants and Toddlers in Nature?" *Children, Youth and Environments* 24 (2): 192–214. doi:10.7721/chilyoutenvi.24.2.0192.
- Hewitt, L., S. Benjamin-Neelon, V. Carson, R. Stanley, I. Janssen, and A. Okely. 2018. "Childcare Centre Adherence to Infant Physical Activity and Screen Time Recommendations in Australia, Canada and the United States: An Observational Study." *Infant Behavior and Development* 50: 88–97. doi:10.1016/j.infbeh.2017.11.008.
- Hills, C. M., A. M. Hogan, and A. Karmiloff-Smith. 2007. "To Sleep, Perchance to Enrich Learning?" *Archives of Disease in Childhood* 92: 637–643. doi:10.1136/ad.2006.096156.
- Kaarby, K., and C. Tandberg. 2017. "The Belief in Outdoor Play and Learning." *Journal of the European Teacher Education Network* 12: 25–36. Accessed 31 March 2021. [oslomet.no](http://oslomet.no).
- Kemp, N., I. Durrant, and J. Josephidou. 2020. "Making Connections with their World: Outdoor Provision for Under Twos in Early Childhood Settings in Kent." Froebel Trust. Accessed 31 March 2021. <https://www.froebel.org.uk/resources/froebel-trust>.
- Kemp, N., and J. Josephidou. 2020. "Where Are the Babies? Engaging the Under Twos with the Outdoors." *The Froebel Trust*. Accessed 29 March 2021. <http://oro.open.ac.uk/69869/1/Where%20Are%20The%20Babies.pdf>.
- Landhuis, C., R. Poulton, D. Welch, and R. Hancox. 2008. "Childhood Sleep Time and Long-Term Risk for Obesity: a 32-Year Prospective Birth Cohort Study." *Pediatrics* 122: 955–960. <https://pediatrics.aappublications.org/content/122/5/955>.
- Malone, K. 2008. "Every Experience Matters: An Evidence-based Research Report on the Role of Learning outside the Classroom for Children's Whole Development from Birth to Eighteen Years." Report Commissioned by Farming and Countryside Education for UK Department Children, School and Families, University of Wollongong.
- Malone, K., and S. Waite. 2016. "Student Outcomes and Natural Schooling." Plymouth: Plymouth University. Accessed 29 March 2021. [https://www.plymouth.ac.uk/uploads/production/document/path/6/6811/Student\\_outcomes\\_and\\_natural\\_schooling\\_pathways\\_to\\_impact\\_2016.pdf](https://www.plymouth.ac.uk/uploads/production/document/path/6/6811/Student_outcomes_and_natural_schooling_pathways_to_impact_2016.pdf).
- Marks, G., J. Shaffery, A. Oksenberg, S. Speciale, and H. Roffwarg. 1995. "A Functional Role for REM Sleep in Brain Maturation." *Behavioural Brain Research* 69: 1–11. doi:10.1016/0166-4328(95)00018-O.
- Morrissey, A., C. Scott, and L. Wishart. 2015. "Infant and Toddler Responses to a Redesign of Their Childcare Outdoor Play Space." *Children, Youth and Environments* 25 (1): 29–56. doi:10.7721/chilyoutenvi.25.1.0029.
- Moser, T., and M. T. Martinsen. 2010. "The Outdoor Environment in Norwegian Kindergartens as Pedagogical Space for Toddlers' Play, Learning and Development." *European Early Childhood Education Research Journal* 18 (4): 457–471. doi:10.1080/1350293X.2010.525931.
- NDET (Norwegian Directorate for Education and Training). 2017. *Framework Plan for Kindergartens*. Accessed 29 March 2021. <https://www.udir.no/globalassets/filer/barnehage/rammeplan/framework-plan-for-kindergartens2-2017.pdf>.
- Nulty, D. 2008. "The Adequacy of Response Rates to Online and Paper Surveys: What Can Be Done?" *Assessment and Evaluation in Higher Education* 33 (3): 301–314. doi:10.1080/02602930701293231.
- OECD (Organisation for Economic Co-operation and Development). 2019. "Family Database. Social Policy Division – Directorate of Employment, Labour and Social Affairs." Accessed 29 March 2021. [https://www.oecd.org/els/soc/PF3\\_2\\_Enrolment\\_childcare\\_preschool.pdf](https://www.oecd.org/els/soc/PF3_2_Enrolment_childcare_preschool.pdf).
- ONS (Office for National Statistics). 2011. "Rural/Urban Classifications: The Classification Systems Used to Produce a Rural/Urban View from Government Statistics." Accessed 29

- March 2021. <https://www.ons.gov.uk/methodology/geography/geographicalproducts/ruralurbanclassifications>.
- Orne, M T. 1962. "On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications." *American Psychologist* 17: 776–783.
- Reunamo, J., L. Hakala, L. Saros, S. Lehto, A. Kyhala, and J. Valtonen. 2014. "Children's Physical Activity in Day Care and Preschool." *Early Years* 34 (1): 32–48. doi:10.1080/09575146.2013.843507.
- Rickinson, M., J. Dillon, K. Teamey, M. Morris, M. Y. Choi, D. Sanders, and P. Benefield. 2004. *A Review of Research on Outdoor Learning*. Shropshire, UK: National Foundation for Educational Research.
- Saleh, A., and K. Bista. 2017. "Examining Factors Impacting Online Survey Response Rates in Educational Research: Perceptions of Graduate Students." *Journal of Multidisciplinary Evaluation* 13 (29): 63–74, Accessed 31 March 2021. [https://journals.sfu.ca/jmde/index.php/jmde\\_1/article/view/487/439](https://journals.sfu.ca/jmde/index.php/jmde_1/article/view/487/439).
- Thigpen, B. 2007. "Outdoor Play: Combatting Sedentary Lifestyles." Zero to Three. Accessed 29 March 2021. <https://www.bowdoin.edu/childrens-center/pdf/outdoor-play-thigpen.pdf>.
- Tourula, M., A. Isola, J. Hassi, R. Bloigu, and H. Rintamäki. 2010. "Infants Sleeping Outdoors in a Northern Winter Climate: Skin Temperature and Duration of Sleep." *Acta Paediatrica* 99: 1411–1417. doi:10.1111/j.1651-2227.2010.01814.x.
- Ulla, B. 2017. "Reconceptualising Sleep: Relational Principles Inside and Outside the Pram." *Contemporary Issues in Early Childhood* 18 (4): 400–408. doi:10.1177/1463949117742781.